

Work Order ID 154885

Tuesday, January 03, 2017 1:09:24 PM

154885

Page 1

Item ID: D4716-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Duct Hose

Start Date: 1/5/2017 Start Qty: 4.00

4

Cust Item ID:

Required Date: 1/17/2017 Req'd Qty: 4.00

4

Customer:

Reference:

DAS

21

9-89

Date: JAN 03 2017

Tooling:

Date:

Run Start

NR1

Approvals:

Process Plan:

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D4716

A

100

0.00

100

Purchasing

Purchasing

Memo

Issue P/O:

MANUFACTURE AS PER DWG D4716

Supplier: CUSTOM DUCTS

Certificate of conformity is required

0.00

JAN 05 2017

DAS

13

9-89

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Packaging

Memo

0.01

46 SP17-01-16

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause			FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :						
Misidentified	☐	Past Due	☐							

Work Order ID 154885

Tuesday, January 03, 2017 1:09:24 PM

154885

Page 2

Item ID: D4716-1 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Duct Hose
Start Date: 1/5/2017 Start Qty: 4.00 ***4*** Cust Item ID:
Required Date: 1/17/2017 Req'd Qty: 4.00 ***4*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC6- Inspect dimensions to drawing	0.00				4			JAN 16 2017 DAS 38 9-89
120									
QC	Memo	0.00							
Quality Control									
130	Identify as per dwg & Stock Location: <u>8E281</u>	0.00							
130									
Packaging	Memo	0.01				4x			JAN 17 2017 DAS 26 9-89
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.07							
Quality Control									17/01/18 ME 17-1-17

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Tuesday, January 03, 2017 1:09:27 PM

Page 1

Work Order ID: 154885

154885

Parent Item: D4716-1

D4716-1

Parent Item Name: Duct Hose

Start Date: 1/5/2017

Required Date: 1/17/2017

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP REV:A 12.11.08 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4716-1P		Purchased	No			110	Each	0.0000	1	4			
D4716-1P									**				
Duct Hose													

4x SPT-01-16

DQA: _____ Date: _____



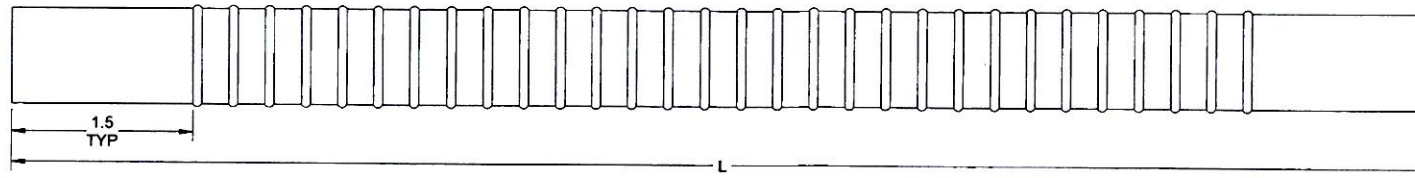
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

SPECIFICATION CONTROL DRAWING



DART PART NUMBER	DESCRIPTION	POSSIBLE VENDOR	VENDOR PART NUMBER	MATERIAL	ID	L	WEIGHT (lb)
D4716-1	DUCT HOSE	CUSTOM DUCTS	SCEET	SILICONE RUBBER	0.75	24.0	0.2
D4716-3	DUCT HOSE	CUSTOM DUCTS	SCEET	SILICONE RUBBER	0.75	28.0	0.2
D4716-5	DUCT HOSE	CUSTOM DUCTS	SCEET	SILICONE RUBBER	0.75	41.0	0.3

D4716-X DUCT HOSE

NOTES:

- 1) MATERIAL: PER TABLE
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: PER TABLE

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 154885 MCT
17-01-03

RELEASED
2012-11-05
JMP

A	NEW ISSUE	RF	12.07.25
REV.	DESCRIPTION	BY	DATE
DESIGN	RF		
DRAWN	RF		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	12.07.25		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D4716	REV. A SHEET 1 OF 1
TITLE DUCT HOSE	SCALE NTS
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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO34828**

Purchase Order Date 1/5/2017

PO Print Date 1/5/2017

Page Number 1 of 2

Order From :
CUSTOM DUCT
179 BEAVER BERRY ROAD

LIMINGTON, MAINE 04049

VU-CD001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

JAN 06 2017

E-MAILED

Contact Name
Vendor Phone 207-637-3000

Ship To Contact
Ship To Phone
Ship Via: FedEx Economy collect
Ship Acct:

Buyer Chantal Lavoie
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency USD
FOB Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	D4716-1P AS PER DWG D4716-1 REV. A B154885	Duct Hose DAS 38 9-89	1/12/2017 Yes 1/12/2017		4.00 Each	\$30.00	\$120.00
SP17-01-16							
Line Total:							\$120.00
2	D4716-5P AS PER DWG D4716-5 REV. A B154886	Duct Hose	1/12/2017 Yes 1/12/2017		12.00 Each	\$38.00	\$456.00
Line Total:							\$456.00

Note:

1/5/2017

Custom Duct

179 Beaver Berry Rd
 Limington, ME 04049
 PH 1 800 863 2620

Invoice

Date	Invoice #
1/10/2017	2023

Bill To
Dart Aerospace 1270 Aberdeen Street Hawkesbury, ON K6A 1K7

Ship To
Dart Aerospace 1270 Aberdeen Street Hawkesbury, ON K6A 1K7

P.O. Number	Terms	Rep	Ship	Via	F.O.B.	Project
PO34828	Net 30		1/10/2017	Federal Express		
Quantity	Item Code	Description			Price Each	Amount
4	SCEET	Double Wall SCEET 3 X 24" Your D4716-1P ✓			30.00	120.00
12	SCEET	Double Wall SCEET 3 X 41" Your D4716-5P			38.00	456.00
	Ship	Shipping Charge Fedex economy collect			0.00	0.00
SA701-16						
DAS 38 9-89						
Phone #		Fax #		E-mail		Total \$576.00
207 637 3000		207 637 3000		kinney@fairpoint.net		

DAS
38
9-89

Custom Duct
179 Beaver Berry Rd.
Limington, ME 04049

CERTIFICATE OF CONFORMANCE

Customer Name: Dart Aerospace Ltd. Purchase Order No: PO34828

✓ 4 EACH SCEET 3 X 24" Your D4716-1P WITH CUFFS

12 EACH SCEET 3 X 41" Your D4716-5P WITH CUFFS

This is to certify that the products, systems and/or services listed here-in have been manufactured, inspected and tested in accordance with Custom Duct and industry standards. It is further certified that the items listed here-on are in compliance with the provisions of your purchase order/ work order listed above. Inspection and test records and material certifications are on file and available upon request.

Signature:



✓ Date: 10 January 2017